



## Hyspan Companies and Capabilities for Piping Motion Products

Hyspan Precision Products, Inc., Since 1968

Flexible Metal Inc., Since 1957

Universal Metal Hose, Since 1923

Hyspan-Barco Ball Joints, Since 1908

Anaconda Company, Since 1908



**BALL JOINTS** Ø1/2" to Ø36+" - 7,000 PSIG – Cryogenic to 500+° F.  
Steel, Stainless Steel and Alloys – 5 Year Warranty



**BELLOWS JOINTS** Ø1" to Ø40 Ft – 300+ PSIG, Cryogenic to 1500+° F., Stainless Steels and Alloys – Axial & Offset - Thermal Motion, Vibration & Stress Reduction



**SLIP JOINTS** Ø1-1/4" to Ø48+" – Perma-Pax® -- 600+ PSIG, 500+° F. Graphite Packing, – 5 Year Warranty



**BRAIDED HOSE** Ø1/8" to Ø34" – 150+ PSIG, 500+ °F., Stainless Steels and Alloys for Hose & Braid – Straight, "V", and "L" – Jacketed – Lined – Cased

## Thermal Expansion, Seismic Motion, Stress Reduction, and Vibration Reduction

### CONVENTIONAL AND INNOVATIVE CONFIGURATIONS

Products include **round** and **rectangular bellows** joints, **laminated** internal and **external pressure**, exhaust and air, **bellows pump connectors** and **braided pump connectors**, and **interlocking hose** connectors. Hyspan also manufactures specific industry products as **pipe alignment guides**; **flow measurement venturis** and **meters**, piping support **strut joints** and **vibration snubbers**, and **wire braid**. Besides Hyspan, **other brand names include: Hyspan-Barco, Universal Metal Hose, Anaconda Metal Hose/Anamet Industrial, and Flexible Metal Inc.**

### EXPERIENCE

Five Manufacturing Locations with more than 250,000 square feet capacity and experience in many markets:

Aerospace

Power

Refinery

Chemical & Petrochemical

Pulp & Paper

Biomedical

HVAC/Commercial

Automotive/Truck/Off-Road Equipment

Gas Turbine, Reciprocating

Moving & Stationary Engine Exhaust

District Energy Distribution

Building Heating & Cooling systems

Oil & Gas – Offshore & Onshore

Municipal Water & Waste Water

Geothermal

Research & Development

Kilns, Driers, Cement, Ash

Solid Waste Incineration

Heat Exchangers

Marine Piping & Exhaust

Concentrated Solar Power

### TECHNICAL SUPPORT

Hyspan is an active member of the Expansion Joint Manufacturers Association (**EJMA**) and holds a seat on the EJMA Technical Committee. Engineering systems include **ANSYS DesignSpace**® Finite Element Analysis, **Inventor**®, **AutoCAD**®, and proprietary **EJMA Bellows Stress Analysis**. In addition to **EJMA** certification, Hyspan has **ASME VIII U & R** stamps, and is **ISO 9001-2000** registered with **PED, (TUV)** capability.

Please fill in the parameters below and fax or e-mail to Bay Industrial  
fax # 604. 940-1478 e-mail: sales@bayindustrial.com

## EXPANSION JOINT SPECIFICATION SHEET

### PRIMARY INFORMATION

Quantity: \_\_\_\_\_ Size Ø: \_\_\_\_\_  
Length: \_\_\_\_\_ (hot \_\_\_ or cold \_\_\_)  
Pressure: \_\_\_\_\_ psig or \_\_\_\_\_  
Design \_\_\_\_\_ or Operating \_\_\_\_\_  
Temperature: \_\_\_\_\_ °F. \_\_\_ or °C. \_\_\_  
System Location: Hanging \_\_\_ Ground \_\_\_  
Tunnel \_\_\_ Pipe Rack \_\_\_ Other \_\_\_  
Service: (select one)  
Thermal Expansion \_\_\_\_\_  
Stress Reduction \_\_\_\_\_  
(including seismic or settling)  
Vibration \_\_\_\_\_ (which plane \_\_\_\_\_)  
(RPM \_\_\_\_\_ frequency \_\_\_\_\_ amplitude \_\_\_\_\_)  
Motions:  
Compression: \_\_\_\_\_  
Extension: \_\_\_\_\_  
Lateral: \_\_\_\_\_  
Angular: \_\_\_\_\_  
Torsional: \_\_\_\_\_ (ball/slip joint only)  
Media flowing through joint: \_\_\_\_\_  
Flow Velocity \_\_\_\_\_ (fps, fpm, cfm, scfm)  
System materials of Construction: \_\_\_\_\_  
Pipe \_\_\_\_\_ Wall thickness \_\_\_\_\_  
Duct \_\_\_\_\_ OD \_\_\_\_\_ or ID \_\_\_\_\_  
End fittings:  
Flanges: \_\_\_\_\_ Rating \_\_\_\_\_ Type \_\_\_\_\_  
Fixed \_\_\_\_\_ Rotating \_\_\_\_\_ Grade \_\_\_\_\_  
Weld Ends: \_\_\_\_\_ Sch. \_\_\_\_\_ Grade \_\_\_\_\_  
Grooved Ends: \_\_\_\_\_ Sch. \_\_\_\_\_ Grade \_\_\_\_\_  
Square cut pipe or duct: \_\_\_\_\_  
Other: \_\_\_\_\_  
Horizontal \_\_\_ Vertical \_\_\_ Other \_\_\_  
Rods \_\_\_ Liner \_\_\_ Shroud \_\_\_ Stops \_\_\_  
Universal \_\_\_ Hinge \_\_\_ Gimbal \_\_\_  
Anchor Base \_\_\_ (main \_\_\_ intermediate \_\_\_)  
Pressure Balanced \_\_\_ Pantograph \_\_\_

### ADDITIONAL INFORMATION

Specification: \_\_\_\_\_ (EJMA, ASME B31.1,  
ASME B31.3, ASME Section VIII, PED)  
New \_\_\_ or Replacement: \_\_\_\_\_  
Delivery: \_\_\_\_\_  
Current manufacturer: \_\_\_\_\_  
Current part number: \_\_\_\_\_  
Current life/Comments: \_\_\_\_\_  
Frequency of system cycling: \_\_\_\_\_  
Driven by Price: \_\_\_\_\_ or Quality: \_\_\_\_\_  
End user: \_\_\_ Contractor: \_\_\_ Other: \_\_\_  
Special test pressure: \_\_\_\_\_, psig or \_\_\_\_\_  
Special spring rates desired:  
Compression: \_\_\_\_\_ lbs./in.  
Extension: \_\_\_\_\_ lbs./in.  
Lateral: \_\_\_\_\_ lbs./in.  
Angular: \_\_\_\_\_ in.-lbs./degree  
Torsional: \_\_\_\_\_ in.-lbs./degree  
Special paint: \_\_\_\_\_  
(high-temperature aluminum and black enamel std.)  
Special surface preparation: \_\_\_\_\_  
Special packaging: \_\_\_ export crate \_\_\_  
Carrier: \_\_\_\_\_ Terms: \_\_\_\_\_ Dlv: \_\_\_\_\_  
Special Conditions or Information:  
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